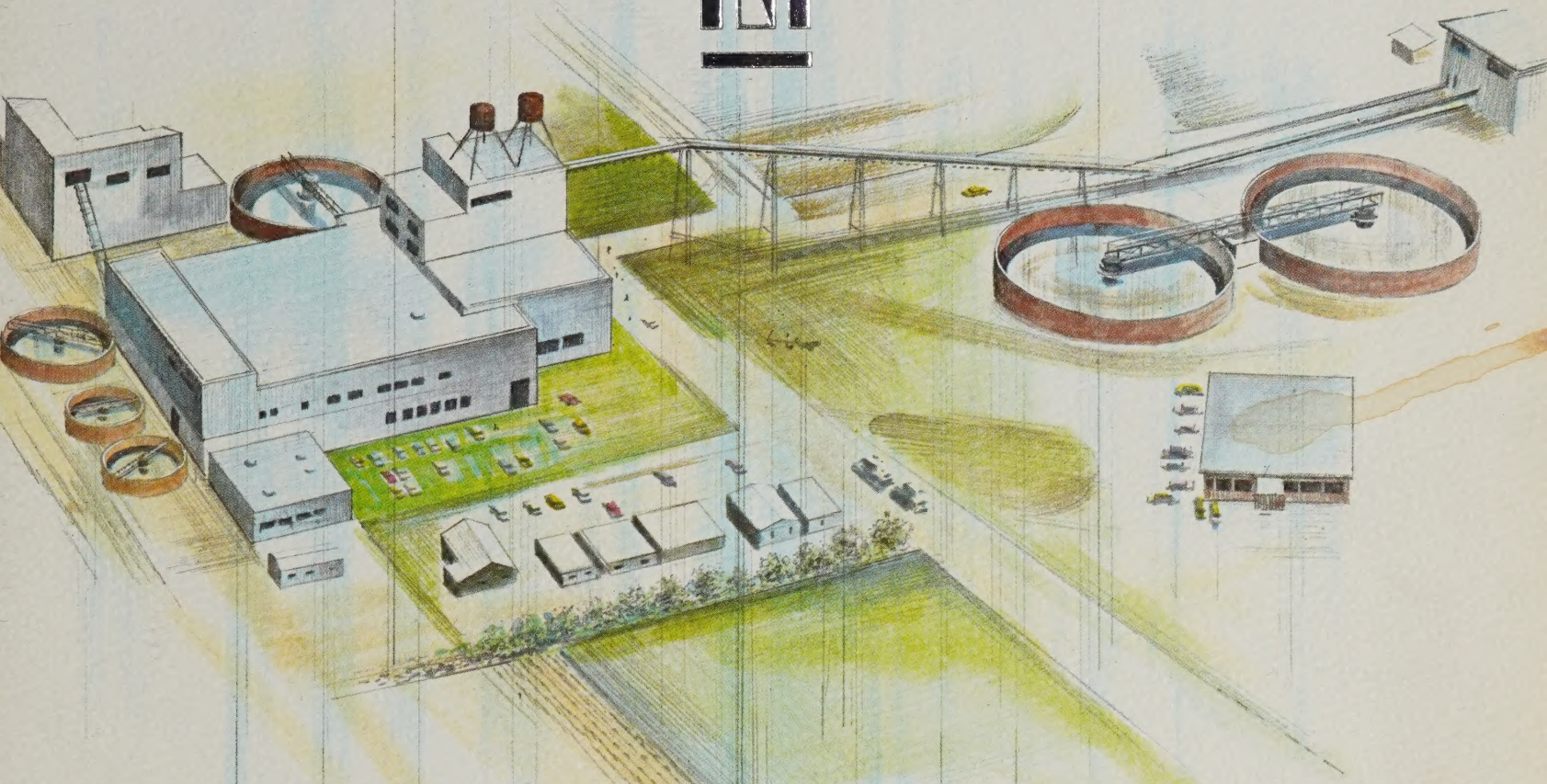




for



ANNUAL
REPORT

NORTHGATE

E X P L O R A T I O N L I M I T E D

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NORTHGATE EXPLORATION LIMITED

DIRECTORS' REPORT



To the Shareholders:

The year 1965 was a significant period for your company and its wholly owned subsidiary, Irish Base Metals Limited. The completion of construction of the 2,000 ton per day concentrator and commencement of operations at the Tynagh Mine in Ireland marked the culmination of the original mineral discovery made late in 1961. Including expenditures for exploration, metallurgical tests and construction, the concentrator complex represents a capital investment of approximately \$13.6 million.

It is of interest to note that on the basis of projected annual capacity operations, the Tynagh Mine would rank as the leading individual lead-zinc producer in Western Europe. It is also the first major lead-zinc mine to be brought into production in Ireland during the past 100 years or more.

Ceremonies marking the official opening of the mine and concentrator were held on October 22nd, with production in commercial quantities being achieved early in December. The earlier scheduled date for completion of the construction program was delayed primarily as a result of two fires which necessitated the replacement of certain equipment items.

Production Financing

The arrangements for financing the Tynagh Mine to production have been described in detail in previous reports to shareholders. Briefly, these arrangements are summarized as follows:

Financing of the construction program for Irish Base Metals Limited involved the sale of \$6,000,000 (Canadian) principal amount of 6½ % Series 'A' First Mortgage Sinking Fund Bonds which were purchased by Northgate Exploration Limited with funds provided by the sale of its \$6,000,000 (Canadian) principal amount of 6½ % Collateral Trust Debentures.

In addition, Irish Base Metals Limited sold \$6,000,000 (U.S.) principal amount of 6¼ % Series 'B' First Mortgage Sinking Fund Bonds. These were purchased by a group consisting of three European smelting firms: Societe Generale des Minerais S.A. of Brussels, Belgium; Metallgesellschaft A.G. of Frankfurt, Germany; and Societe Miniere et Metallurgique de Penarroya S.A. of Paris, France; and The British Metal Corporation of London, England, in an amount totalling \$5,500,000; with the remaining \$500,000 being purchased by Midland and International Banks Limited of London, England.



As noted in the 1964 Annual Report to shareholders, Northgate Exploration Limited purchased \$5,300,000 principal amount of Irish Base Metals Limited Series 'A' Bonds during the 1964 fiscal year, and completed the purchase of the remaining \$700,000 of these Bonds during January, 1965. The effect of these transactions is shown in the accompanying consolidated financial statements for the year ended December 31, 1965.

Actual total construction costs were approximately \$400,000 below pre-production estimates.

Construction Program

As previously mentioned, completion of con-



Prime Minister Sean Lemass of the Republic of Ireland, Patrick J. Hughes, President of Northgate Exploration Limited, push lever detonating explosive charge in the open pit to officially open the Tynagh Mine.

struction of the concentrator and related facilities at the Tynagh Mine was delayed beyond the originally scheduled date of August 31, 1965. However, construction was sufficiently advanced by November 11th that all main components of the concentrator were operative and an initial flow of ore through the plant was achieved. First concentrates were trucked to Galway on November 15th.

Construction was substantially completed by the end of November, with certain minor exceptions in

the electrical work, and in the lime distribution system which is essential to the operation of the zinc sands circuit. During December, the lime distribution system was placed into operation, and the electrical work at the mine and the ship-loading system at Galway were completed.

Only a few minor items of the original concept of the construction project remained incomplete at the end of 1965, and these were subsequently finished early in the current year. The initial shipment of concentrates to Europe left Galway on January 16th, consisting of 1,427 tons of lead concentrate and 3,093 tons of bulk concentrate. Shipments have subsequently been on a regular basis.



Tune-Up Period

Owing to the brief and intermittent operation of the concentrator in November during which ore treatment was restricted to 16,124 tons, actual commencement of the tune-up period was December 1st. In the four month tune-up period ended March 31st, and including the 16,124 tons treated in November, a total of 151,550 tons of ore was processed, for a daily average of approximately 1,082 tons, equal to about 54% of capacity.

Concentrate output for this period totalled 29,411 tons, consisting of 6,922 tons of lead concentrate averaging 63.40% lead; 9,206 tons of zinc

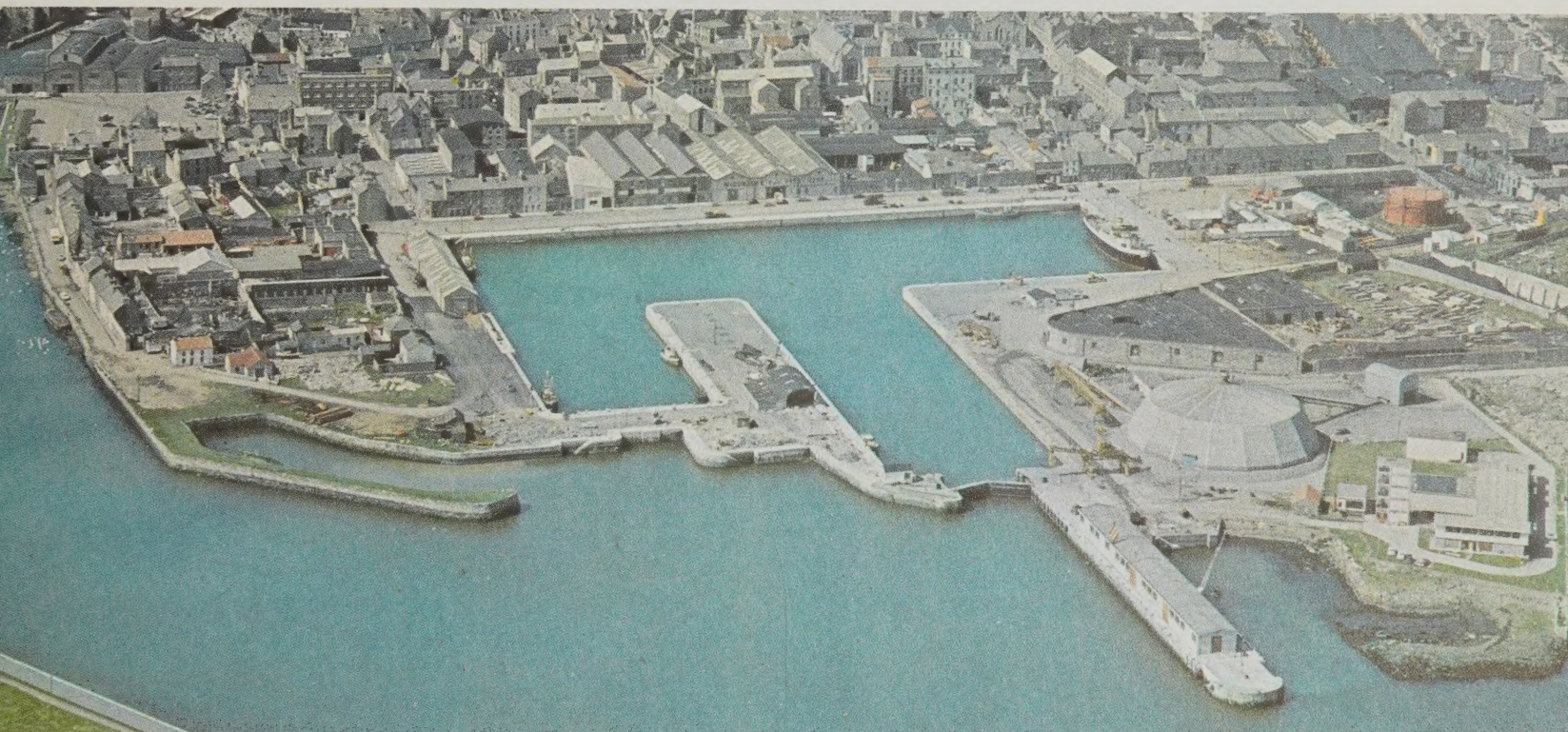
concentrate averaging 49.02% zinc; and 13,283 tons of bulk concentrate averaging 25.70% lead and 27.74% zinc. The estimated net realizable value of the concentrates produced during this tune-up period, after deducting shipping, smelter treatment and marketing charges, was \$2,583,861.

As can be anticipated in any new ore processing plant, and particularly in view of the materials handling problems involved in the Tynagh ores, modification of equipment and refinements of extraction methods have been required. While most of these adjustments were of a comparatively minor nature and changes were made with a minimum of

visual days during March and April. This operating experience, combined with the fact that metal recoveries and concentrate grades even in this initial phase have been within range of the pre-production forecasts, substantially confirms the satisfactory basic design of the plant.

Ore Grade and Recoveries

The indicated average grade of ore treated during the tune-up period was 7.19% lead and 9.90% zinc. These grades compare with a forecast of 5.92% lead and 7.47% zinc from this section of the pit, and an overall average grade for the



Aerial view of the Port of Galway, Ireland, showing the circular concentrate storage and shiploading facility of Irish Base Metals Limited at lower right.

down time for a normal tune-up period, certain mechanical problems were encountered.

These principally occurred in the crushing section, and in the filtering, drying and extruding systems. Engineering studies and tests have been carried out on certain of these equipment items and suitable replacement parts and equipment have been ordered.

While these mechanical problems have hampered sustained operation at optimum capacity of 2,000 tons daily, it is to be noted that tonnages in excess of rated capacity have been treated in several indi-

vidual days during March and April. This operating experience, combined with the fact that metal recoveries and concentrate grades even in this initial phase have been within range of the pre-production forecasts, substantially confirms the satisfactory basic design of the plant.

Payable metal recoveries during this same period varied between 70.3% and 75.2% for lead; and 39.2% and 68.6% for zinc. The low average zinc recovery occurred in December, and thereafter improved to an average of 65% or better during the months of January to March. In April, with the plant operating about 70% of capacity, recoveries averaged 76.9% for lead and 67.5% for zinc. With further refinements and adjustments in the extraction methods, and as operations approach optimum rates, it is expected that recoveries will reach or exceed the forecast 78% for lead and zinc.

Pending the installation of special assaying equipment, determination of silver content is based on smelter settlements. These indicate a consistent average content of 17 ounces of silver per ton in the lead concentrates; between 10 and 13 ounces per ton in the bulk concentrates; and approximately 9 ounces per ton in the zinc concentrates. Silver recoveries approximate the forecasts for this portion of the sulphide ore.

The forecasts of payable metal content in the concentrates, being 65% for lead, a 50% combined

that ore removal can be carried out with little difficulty even under conditions of heavy precipitation during the winter months. A two-shift operation in the open pit commenced during January to expedite bench preparations. Bench preparation in the oxide ore section containing an economic content of copper has been scheduled in order to take advantage of current high prices for this metal. It is expected that oxide ore containing copper will be introduced into the circuit during the months of August and September.



The 635-foot long conveyor transports the crushed ore to the main concentrator building where the metals are extracted in concentrates.

lead-zinc in the bulk, and 55% zinc in the zinc concentrates, were substantially achieved in the tune-up period, with progressive improvement noted latterly in this phase. This was evident in the March production with lead concentrates averaging 65.86% lead; bulk concentrates averaging 53.1% combined lead-zinc; and zinc concentrates averaging 50.71% zinc.

In terms of gross revenue, lead is the most significant of the metals produced, representing about 60% of total smelter returns under normal operating conditions.

Mining

Operating experience in the mine open pit has been satisfactory, and it has also been demonstrated

Mine Operating Profit

Mine operating profit for the first quarter of 1966, during which the concentrator operated at 58.7% of capacity, was equal to approximately \$1,325,000. This was from the treatment of 105,684 tons of ore grading an average of 6.67% lead and 10.09% zinc, with an output of 23,060 tons of concentrate. Production consisted of 4,589 tons of lead concentrate averaging 61.87% lead; 8,223 tons of zinc concentrate averaging 49.15% zinc; and 10,248 tons of bulk concentrate averaging 51.97% in combined lead-zinc. In addition, there was a payable recovery of silver.

Direct operating costs per ton of ore milled during the first quarter varied from \$4.91 to \$5.75. These costs can be expected to decrease as larger tonnages are treated and with improved operating efficiency. The first quarter was a tune-up period.

Operating profit for the month of April with the concentrator operating at 70.6% of capacity, was approximately \$647,532. Ore treated during the month totalled 42,414 tons averaging 6.96% lead and 10.02% zinc, with an output of 9,366 tons of concentrate. Production consisted of 2,307 tons of lead concentrate averaging 65.65% lead; 3,878 tons of zinc concentrate averaging 51.64% zinc; and 3,181 tons of bulk concentrate averaging 50.90% combined lead-zinc.

Payable recoveries of metals in the concentrates during the month of April averaged 76.8% for lead and 67.5% for zinc. As the throughput of ore increases to optimum rates there should be a proportionate improvement in unit operating costs and increased profit margin. The addition of copper in

the concentrates, commencing during August and September, will also reflect in total net smelter revenues.

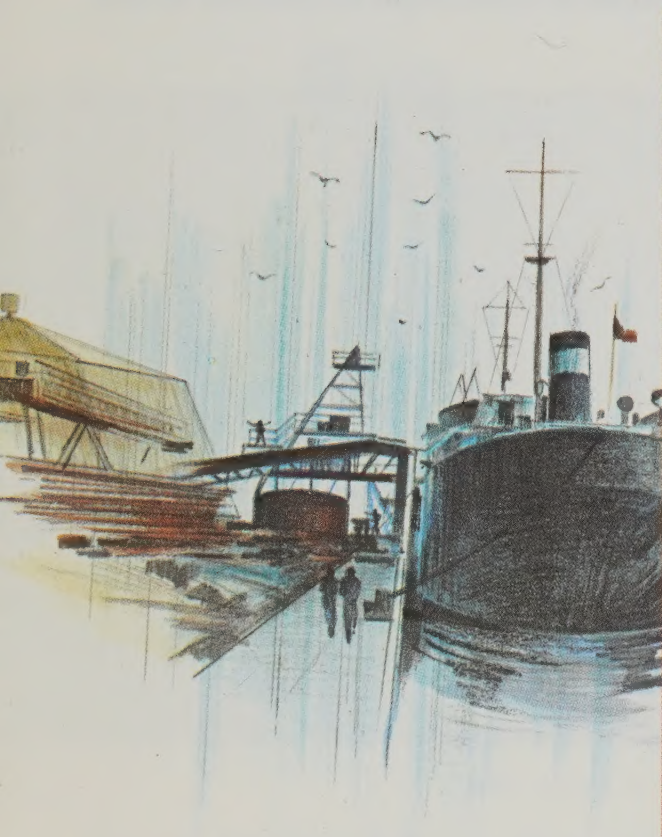
Smelter settlements are based on London Metal Exchange quotations for lead, copper and silver, and on the producers' price for zinc.

Cash Flow

Cash flow during the first quarter tune-up period, after deductions for head office costs, exploration,

mately 100,000 tons per year of barytes concentrate. The calculated product would be about 93% BaSO_4 .

The principal use of barytes is in the manufacture of heavy drilling mud used in the drilling of oil and gas wells. Irish Base Metals Limited has retained a firm of marketing consultants to evaluate the export market for barytes produced in Ireland. The company has already received enquiries from potential buyers, and it is further noted that recent developments in the North Sea where at least two separate commercial gas discoveries have been re-



The S.S. Gonzenheim, of Bremen, loading up with the first shipment of concentrates from the Tynagh Mine destined for the European buyers.

government royalties, interest charges on bonds, debentures, etc., was approximately \$933,000.

Cash flow for the month of April, after the same deductions, was \$493,275. This was realized with the plant operating at 70.6% of capacity.

By-Product of Barytes

Concentration tests have demonstrated that an acceptable grade of barytes can be produced as a by-product from the ores now being mined at Tynagh. The estimated barytes content of 28% would indicate a potential production of approxi-

corded, suggest a local demand for barytes which would be of particular interest to Irish Base Metals Limited.

Detailed planning including pilot plant testing for the contemplated by-product recovery of barytes from the Tynagh Mine is now in progress.

General Exploration

Your company, through its wholly owned subsidiary, Irish Base Metals Limited, is prominent among other companies active in exploration in Ireland in terms of the prospecting licences held

which cover in excess of 225 square miles in Counties Galway, Wicklow, Waterford, Wexford and Limerick. In addition, interests varying from 25% to 50% are held in other prospecting licences jointly held with other companies, covering a further total area of 100 square miles in Ireland.

Apart from comparatively limited exploration carried out in certain areas in Ireland, the main activities of your company and its subsidiary over the years since the Tynagh discovery in 1961, have been primarily concentrated on the development and construction program on the latter property. Under



The Tynagh Mine concentrator complex.

the terms of the financing arrangements, Irish Base Metals Limited has been restricted in its exploration expenditures, except when funds of up to \$150,000 are available for this purpose out of net cash flow from the mining operation.

With such funds now available, an active program of exploration is being initiated. One of the main targets for this program will be the County Clare concession which was under active investigation at the time of the Tynagh discovery when work was suspended in order to concentrate on the latter. The County Clare concession covers approximately 150 square miles in a favorable geological environment, which includes six small sulphide deposits which were mined for lead and copper in the last century.

Further exploration is also planned for the known favorable areas adjacent on strike to the Tynagh Mine property in County Galway. The company's holdings in this area cover a considerable extent.

Gortdrum Mines Limited

As previously mentioned, your company has a substantial share interest in Gortdrum Mines Limited which is now preparing its copper-silver property in Gortdrum Townland, Tipperary, for production. Commencement of production is scheduled for mid-



1967 with a treatment rate of 1,500 tons per day. Drill indicated ore reserves are estimated to total 4,191,000 tons averaging 1.19% copper and 0.75 ounce silver per ton. Canadian Bechtel Limited has completed the feasibility study and production planning has been advanced to the point of commencing preliminary site preparation for the concentrator complex. Stripping of overburden in preparation of the open pit is slated to commence during May, 1966.

Currently, negotiations are in progress for production financing based on an estimated project cost of \$6,000,000. Similarly, marketing arrangements for the copper concentrate output are under negotiation.

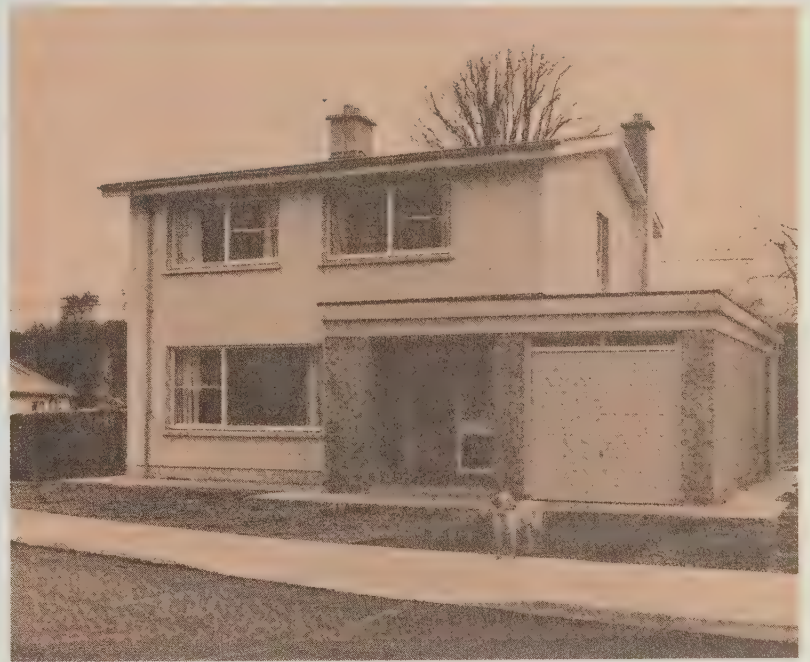
Housing Project

Housing for staff and mine employees has been provided at the neighboring town of Loughrea. A total of 14 staff houses have been constructed for Irish Base Metals Limited under an agreement with National Building Agency Limited, a government owned housing corporation. These houses, pictures of which appear in the Annual Report, have been completed and are ready for occupancy.

National Housing Agency Limited is currently developing a townsite in Loughrea where up to 53 houses will be constructed, most of which will be

for this metal, and the opportunity to maximize earnings during the tax-free period. The company's holdings in Gortdrum Mines Limited, now preparing for production scheduled in 1967, constitute an important asset.

Resumption of basic exploration is another significant development for the current fiscal year. Your company's technical staff has gained valuable experience through the exploration and development of the Tynagh Mine, and it is felt that this knowledge and technical organization can be usefully employed in the exploration of the extensive mineral rights held in Ireland under prospecting licences.



Staff housing at the Loughrea Townsite, County Galway.

occupied by mine employees. The expected completion date for these houses is June 30th.

General

Operating experience at the Tynagh Mine during the tune-up period has been consistent with pre-production forecasts. Adjustments in the treatment process and mechanical modifications which are normal to any new plant of this type, are being made and further improvement in operating efficiency can be expected. While certain mechanical difficulties have hindered operations reaching sustained capacity rate, this situation should be alleviated when replacement parts and equipment have been installed.

The decision to mine the oxide ore containing copper was prompted by the current high prices

Commencing with the quarter ending June 30, 1966, quarterly reports will be issued to shareholders.

The Directors acknowledge the effective services provided during the year by the General Manager, Mr. Murray K. Pickard, the technical staff and employees of the company. It is with profound regret that we record the death during 1965 of Mr. William N. Hovey, a director of both Northgate Exploration Limited and Irish Base Metals Limited. Mr. George M. Wilson was elected to fill these vacancies.

On behalf of the Board of Directors,

Pat. J. Hughes.

May 16, 1966.

President.

CONSOLIDATED BALANCE SHEET AS AT DECEMBER 31, 1965

(with comparative figures at December 31, 1964)

ASSETS

CURRENT ASSETS

Cash

Short term securities at cost

Concentrates on hand at estimated net realizable value (note 2)

Accounts receivable and accrued interest

Prepaid expenses

FUNDS HELD BY TRUSTEES (note 3)

Cash and short term securities at cost

SHARES IN AND ADVANCES TO OTHER COMPANIES

Listed shares in another mining company at cost (quoted market value, 1965, \$440,012)

Other shares, advances and participations at cost less amounts written off

FIXED ASSETS

Buildings, machinery and equipment at cost (note 7)

Land in Ireland at cost

Mining claims in Canada at nominal value

OTHER ASSETS AND DEFERRED CHARGES

Supplies at average cost

Exploration, development and administrative expenditures deferred (note 7)

Excess of cost of shares in subsidiary company over book value of underlying assets at date acquisition

Debt discount and expenses, less amortization

Improvements to leased premises at cost (note 7)

Organization expenses

LIABILITIES

CURRENT LIABILITIES

Bank loan (secured by shares in other companies)

Accounts payable and accrued liabilities

Notes payable on equipment purchases, due within one year

Accrued interest on long term debt

LONG TERM DEBT (note 4)

6½ % Collateral trust debentures, due May 1, 1971

6¼ % First mortgage sinking fund bonds, series B, issued by subsidiary company, due May 1, 1971 (U.S. \$6,000,000)

Notes payable on equipment purchases, due 1967 and 1968

SHAREHOLDERS' EQUITY

Capital stock (note 6)

Authorized — 5,000,000 shares of \$1 each

Issued — 4,979,200 shares

Contributed surplus (premium less discount on shares)

Deduct deficit

NORTHGATE EXPLORATION LIMITED

(Incorporated under the laws of the Province of Ontario)

AND ITS WHOLLY OWNED SUBSIDIARY COMPANY

IRISH BASE METALS LIMITED

1965	1964
107,866	\$ 460,960
402,447	
695,820	
86,927	83,383
32,388	44,335
1,325,448	588,678
723,233	1,851,966
395,757	23,586
164,870	1
560,627	23,587
8,689,672	3,361,559
232,748	219,509
1	1
8,922,421	3,581,069
225,150	
4,814,715	3,055,815
983,326	983,326
494,954	587,742
27,796	27,796
	10,051
6,545,941	4,664,730
8,077,670	\$10,710,030

500,000	
655,801	\$ 198,982
96,489	85,425
65,000	65,000
1,317,290	349,407
6,000,000	6,000,000
6,437,997	
83,616	168,246
2,521,613	6,168,246
4,979,200	4,979,200
166,951	166,951
5,146,151	5,146,151
907,384	953,774
4,238,767	4,192,377
8,077,670	\$10,710,030

AUDITORS' REPORT

To the Shareholders of
NORTHGATE EXPLORATION LIMITED:

We have examined the consolidated balance sheet of Northgate Exploration Limited and its subsidiary company, Irish Base Metals Limited, as at December 31, 1965 and the consolidated statements of exploration, development and administrative expenditures deferred and deficit for the year then ended. Our examination of the financial statements of Northgate Exploration Limited (the parent company) included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances. With respect to the subsidiary company, Irish Base Metals Limited, of which we are not the auditors, we have carried out such enquiries and examinations as we considered necessary in order to accept for purposes of consolidation the report of its auditors.

In our opinion the accompanying consolidated balance sheet and consolidated statements of exploration, development and administrative expenditures deferred and deficit present fairly the financial position of the companies as at December 31, 1965 and the results of their operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

We have also examined the accompanying consolidated statement of source and application of funds for the year ended December 31, 1965. In our opinion the statement presents fairly the sources and applications of funds for the year.

GUNN, ROBERTS AND Co.,
Chartered Accountants.

Toronto, Canada
April 20, 1966

Approved on behalf of the Board:

R. E. FASKEN, Director.

G. T. SMITH, Director.

CONSOLIDATED STATEMENT OF EXPLORATION, DEVELOPMENT AND ADMINISTRATIVE EXPENDITURES DEFERRED

	Deferred at Jan. 1, 1965	Expenditures in 1965	Deferred at Dec. 31, 1965
Drilling	\$ 456,124	\$ 22,095	\$ 478,219
Assaying and laboratory services	151,317	37,980	189,297
Removal of overburden and pit development	280,037	350,811	630,848
Metallurgical research, test plant operation and surveys	260,645	19,038	279,683
General expenses at the property	392,816	175,200	568,016
Mine management, engineering, geological and mine office expenses	574,747	141,756	716,503
Mining and milling		207,993	207,993
Temporary buildings and test plant written off		302,985	302,985
Outside exploration	77,232	26,280	103,512
Administrative and general expenses	665,468	510,220	1,175,688
Interest on debentures and bonds	230,082	646,051	876,133
Amortization of debt discount and expenses	101,856	99,607	201,463
Interest earned	(134,509)	(95,460)	(229,969)
	<u>3,055,815</u>	<u>2,444,556</u>	<u>5,500,371</u>
Deduct estimated net realizable value of concentrate produced prior to commencement of production in reasonable com- mercial quantities:			
Metal recovery, gross value		1,014,861	1,014,861
Less transportation and treatment costs		329,205	329,205
		<u>685,656</u>	<u>685,656</u>
Expenditures deferred (net)	<u>\$3,055,815</u>	<u>\$1,758,900</u>	<u>\$4,814,715</u>

CONSOLIDATED STATEMENT OF DEFICIT

— For the year ended December 31, 1965

Deficit January 1, 1965	\$ 953,774
Add organization expenses written off	10,051
	<u>963,825</u>
Deduct profit on sale of shares in other mining companies	56,441
Deficit December 31, 1965	<u>\$ 907,384</u>

CONSOLIDATED STATEMENT OF SOURCE AND APPLICATION OF FUNDS

— For the year ended December 31, 1965

SOURCE OF FUNDS

Issue of U.S. \$6,000,000 6¼ % first mortgage sinking fund bonds	\$6,437,997
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APPLICATION OF FUNDS

Construction of buildings and acquisition of machinery and equipment	\$5,631,098
Purchase of land	13,239
Exploration, development and administrative expenditures (less amortization of debt discount and expense \$99,607 and write off of temporary buildings and test plant \$302,985)	1,356,308
Purchase of shares in other mining companies, less sales	480,599
Purchase of supplies inventory	225,150
Reduction in non-current portion of notes payable	84,630
Other items	6,819
	<u>7,797,843</u>

DECREASE IN FUNDS HELD	<u>\$1,359,846</u>
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Funds held consist of current assets and funds held by trustees, less current liabilities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 1965

1. CURRENCY CONVERSION

Current assets and current liabilities of the Irish subsidiary company are converted to Canadian dollars at the rate of exchange prevailing at December 31, 1965. Other assets and deferred charges are converted at rates prevailing when funds for the expenditures were provided. Long term debt is converted at rates prevailing when the debt was incurred.

2. SALE OF CONCENTRATES AND METAL PRICES

The Irish subsidiary company has entered into agreements for the sale of the concentrates produced from the Tynagh Mine in the first five years of production.

In computing the estimated net realizable value of smelter settlements outstanding and concentrates on hand, metal prices have been used as follows:

Lead	—	£100	per 2,240 lbs.
		(Cdn. \$.135	per lb.)
Zinc	—	£110	per 2,240 lbs.
		(Cdn. \$.148	per lb.)
Silver	—	111d.	per ounce
		(Cdn. \$1.395	per ounce)

3. FUNDS HELD BY TRUSTEES

Funds held in trust are to be (a) applied in payment of plant construction accounts outstanding at December 31, 1965, (b) paid to the company for working capital, if the mining engineer for the trustee certifies that such additional working capital is required, or (c) applied in redemption of the Series B bonds of Irish Base Metals Limited.

4. LONG TERM DEBT

The 6½% collateral trust debentures are secured in part by an equivalent principal amount of the Irish subsidiary company's 6½% first mortgage sinking fund bonds, Series A. Sinking

fund provisions of the Series A and Series B bonds issued by the Irish subsidiary company require a mandatory payment in each of the years 1967 to 1970 of \$1,200,000 on the Series A bonds and 20% of the amount of Series B bonds issued. In addition, further amounts may be payable based on production and cash flow. The monies received on retirement of the Series A bonds owned by Northgate Exploration Limited are to be applied to the retirement of an equivalent principal amount of the parent company's collateral trust debentures.

5. CONTINGENT LIABILITIES

Actions have been instituted against the companies as follows:

- (a) by three former employees claiming a finders' fee equal to 15% of the value of the properties for the location of the Tynagh property in Ireland; and
- (b) by a stripping contractor claiming \$150,000 for services and for damages.

The company has denied any liability in these matters except for certain overburden removal costs for which \$18,000 is included in accounts payable and accrued liabilities.

6. CAPITAL STOCK

At December 31, 1965 there were 10,000 shares under option to an employee at \$4 per share expiring in 1968.

7. DEPRECIATION AND AMORTIZATION

No provision has been made for depreciation of fixed assets, amortization of exploration, development and administrative expenditures deferred or amortization of improvements to leased premises as production in reasonable commercial quantities at the mine had not commenced at December 31, 1965.

OFFICIAL OPENING OF THE TYNAGH MINE

The Tynagh Mine and Concentrator was officially opened October 22, 1965. As the first entirely new major lead-zinc operation for Ireland, it was an occasion of some significance.

Among the large group of people in attendance at the dedication ceremonies were

concentrates, Societe Generale des Minerais S. A. of Belgium; Metallgesellschaft A. G. of Germany; and Societe Miniere et Metallurgique de Penarroya S. A. of France.

Actual commencement of operations of the concentrator on a commercial scale was



The Tynagh Mine open pit will have an ultimate depth of 340 feet and a length of 2,400 feet.



The M. V. Gonzenheim of Bremen, carried the first shipment of Tynagh concentrates to European buyers

representatives of various governments, civic and municipal officials, representatives of financial institutions and several mining corporations, including The British Metal Corporation of England, and the three European smelting firms which have long term contracts for the purchase of the Tynagh

in December, 1965, with the initial shipment of concentrates from the storage and ship-loading facility at Galway to European buyers being made on January 16, 1966. This brings to a complete circle the chain of events that began with the mineral discovery in 1961.

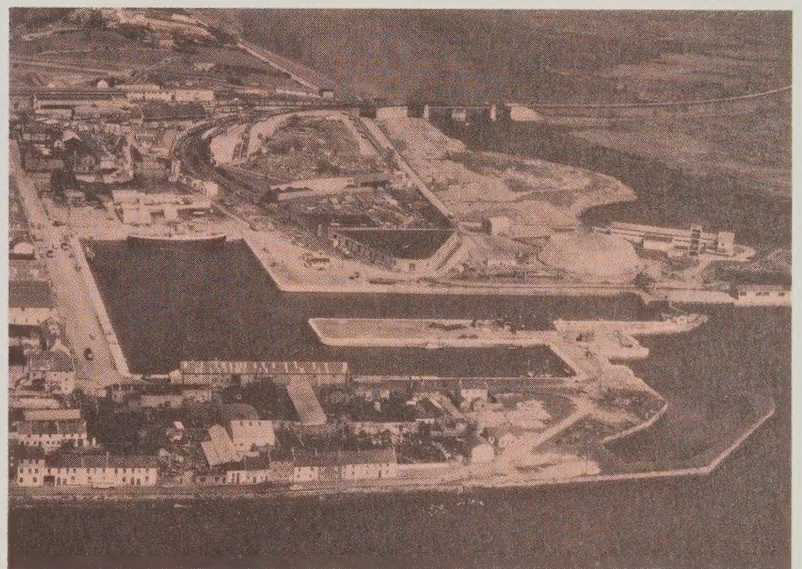
Operating at capacity, the Tynagh Mine will produce an average of 100 million pounds of lead, over 50 million pounds of zinc, and one and one half million ounces of silver annually. In addition, there is an estimated nine million pounds of copper recoverable from the secondary oxide ore, expected

The Tynagh Mine commenced production with indicated reserves adequate for a minimum eleven year period at an annual treatment rate of 700,000 tons, with an output of 150,000 tons of concentrates per year.

Including the personnel at the Port of



Inside the circular 20,000 square foot concentrate storage building at the Port of Galway.



The company's concentrate storage and shiploading facility is about centre in this aerial view of Galway.

to be produced over a four to five year period, or at an annual average output of about two million pounds.

And on the basis of projected capacity operation, the Tynagh Mine will rank as the leading individual lead-zinc producer in Western Europe.

Galway installation, a total of 230 persons were employed by Irish Base Metals in connection with the operation of the Tynagh Mine. The present complex represents a total capital investment, including the exploration and development costs, of \$13.6 million.

IRISH BASE METALS LIMITED

BOARD OF DIRECTORS

G. W. ARMSTRONG	Northgate Exploration Limited, Toronto, Canada
W. CASPER	Metallgesellschaft A.G., Frankfurt, Germany
A. DE JAER	Societe Generale des Minerais S.A., Brussels, Belgium
DR. D. R. DERRY	Duncan R. Derry Limited, Toronto, Canada
R. E. FASKEN	Northgate Exploration Limited, Toronto, Canada
M. GILROY	Northgate Exploration Limited, Toronto, Canada
P. J. HUGHES	Northgate Exploration Limited, Toronto, Canada
DR. W. F. JAMES	James, Buffam & Cooper, Toronto, Canada
J. K. MCCAUSLAND	Wood Gundy Securities Limited, Toronto, Canada
J. V. MCPARLAND	Tara Exploration & Development Co. Ltd., Dublin, Ireland
G. T. SMITH	Northgate Exploration Limited, Toronto, Canada
M. TREBUCQ	Societe Miniere et Metallurgique de Penarroya S.A., Paris, France
G. H. WHITE	The British Metal Corporation Limited, London, England
H. S. WHITE	The Toronto-Dominion Bank, London, England
G. M. WILSON	Equitable Securities Canada Limited, Toronto, Canada

SUBSTITUTE DIRECTORS

P. HARRINGTON	Dublin, Ireland
W. HORSTER	Metallgesellschaft A.G., Frankfurt, Germany
P. J. LENIHAN	Athlone, Ireland
M. V. O'BRIEN	Dublin, Ireland
A. M. R. SYLVESTER	The British Metal Corporation Limited, London, England

OFFICERS

PATRICK J. HUGHES	Chairman of the Board
S. P. BOLAND	Secretary
MURRAY K. PICKARD	General Manager

REGISTERED OFFICE

162 Clontarf Road, Dublin 3, Ireland

MINE OFFICE

Tynagh, County Galway, Ireland



